

REMARKS

Claims 1-31 are pending in the application.

Claims 1-31 have been rejected.

Rejection of Claims under 35 U.S.C. §102(e)

In the Office Action mailed May 31, 2006 (hereinafter referred to as "OA1"), the Final Office Action mailed November 24, 2006 (hereinafter referred to as "FOA"), and the Office Action mailed May 17, 2007 (hereinafter referred to as "OA2"), claims 1-31 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication 2004/0010487 issued to Prahlad et al. (hereinafter referred to as "Prahlad"). Applicants respectfully traverse this rejection.

As noted in the previous responses, the cited art does not teach or suggest "discovering a plurality of components of a database," as recited in claim 1. The Examiner equates "raw logical volumes" with "components of a database." OA1, p. 4. The Applicants respectfully disagree with this assertion and note that one of ordinary skill in the art would not consider the logical volumes used by a database to be components of the database.

The basis for the Examiner's equation of a logical volume with a database component appears to be a sentence in paragraph 45 of Prahlad, which states: "Sophisticated software, such as database management systems ("DBMS"), may use special file system features or even raw logical volumes, and employ measure to protect the consistency of data and metadata." However, this sentence simply states that a DBMS can make use of a raw logical volume. The mere statement that a DBMS can use a logical volume neither teaches nor suggests that a logical volume is a component of a database.

In FOA, the position set forth in OA1 is reiterated: "Now, the mere fact that a DBMS can make use of a raw logical volume suggests that volumes can be construed to be a component of a database. Just as the mere fact that a car can make use of a tire, suggests that a tire is a component of a car." FOA, p. 21.

The Applicant notes that nothing in the cited art teaches or suggests that the raw logical volume is part of database. Furthermore, based on the Examiner's analogy, the mere fact that the DBMS uses the raw logical volume would, at best, suggest that the

volume might somehow be part of the DBMS, not that the raw logical volume is part of a database managed by the DBMS. The Applicant further notes that one of ordinary skill in the art would not consider such a raw logical volume to be part of either a DBMS or a database managed by a DBMS.

Nevertheless, in order to expedite prosecution, the Applicant amended claim 1 to make it abundantly clear that the database “comprises” the components and that the database, and thus the plurality of components included within the database, is stored on a storage volume. Since the cited portions of Prahlad do not teach or suggest a database that is stored on a volume and that comprises a plurality of components, the cited portions of Prahlad clearly neither teach nor suggest claim 1.

Applicant further notes that none of the cited portions of the reference teach or suggest “discovering a plurality of components of a database.” As noted above, the raw logical volumes are not database components. Furthermore, there is no teaching or suggestion to discover database components. The cited reference is concerned with generating and managing quick recovery volumes. Prahlad, Title. Furthermore, the reference neither attempts to nor expresses any desire to interact with individual database components. Thus, the reference clearly does not teach or suggest anything about “discovering a plurality of components of a database.”

In response to the above arguments, the Examiner reiterates the position that: “If it is connected it can be construed to be a component. Accordingly, applicant’s assertions directed towards a logical volume is not a component of a database is unpersuasive.” OA2, p. 18. In response, the Applicant respectfully submits that this is an unreasonable interpretation of the term component. Stating that a first item is connected to a second item in no way teaches or suggests that the first item is a component of the second item (or vice versa).

Furthermore, the Examiner has stated that the amendment to claim 1, which emphasizes that the database “comprises” the components (i.e., those components are included within the database) and that the database is stored on a storage volume, “does not necessarily distinguish anything. If a database utilizes a volume, that volume is also a part of the database, and hence is a component of that database.” OA2, p. 19. The Applicant respectfully disagrees with this assertion and notes that mere utilization of a volume by a database does not support the conclusion that the volume is included within the database. Such a conclusion renders the term “comprises” meaningless and thus

impermissibly ignores this term within claim 1. “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (C.C.P.A. 1970).

For at least the foregoing reason, claim 1 is patentable over the cited art, as are dependent claims 2-12. Claims 13-31 are patentable over the cited art for similar reasons.

Further with respect to claim 1, the cited art does not teach or suggest “selecting a data management resource... using an attribute of said component.” The Examiner relies upon paragraph 37 of Prahlad to teach this feature (OA2, p. 3), which recites:

The destination volume for the quick recovery volume may be specified to be copied to specific volumes, or may be selected automatically from a pool of available volumes. The quick recovery agent 108 or the media agent 106, in one embodiment, selects an available volume as the destination volume where the quick recovery volume will be stored. The quick recovery agent 108 may select the volume at random or target a volume according to the storage space available on a particular volume in comparison to the space needed for the quick recovery volume. Once the volume is selected, it is removed from the pool of available volumes. This may be accomplished, for example, by the media agent 106 determining the capacity needed for a quick recovery volume, determining the capacity of the available volumes, and selecting the volume with a capacity exceeding that needed for the quick recovery volume and closer to the capacity needed than the other volumes. Prahlad, paragraph 37.

Nothing in the above paragraph teaches or suggests selecting a data management resource. Instead, paragraph 37 of Prahlad describes selecting a volume, based upon, for example, the attributes of that volume. As noted above, a volume is not a component of a database, and thus making a selection based upon the attributes of a volume does not teach or suggest making a selection based upon an attribute of a component of a database. Furthermore, the volumes described in Prahlad are clearly not data management resources.

Additionally, claim 1 describes selecting one item (a data management resource) based upon an attribute of a different type of item (a component of a database). The cited portion of Prahlad describes selecting one item based upon that same item's attributes. Accordingly, the cited portion of Prahlad additionally fails to teach or suggest the features of claim 1 for this reason.

Further with respect to claim 1, the cited art does not teach or suggest “generating a point-in-time image of said component using said data management resource.” The

Examiner relies upon paragraph 66 of Prahlad to teach this feature. The cited portion of Prahlad recites:

One embodiment of the present invention provides a user interface screen for users to browse and recover data, such as from snapshot images, quick recovery volumes, primary copies, backup copies, etc., as of a point-in-time. Browsing and recovery may be client, sub-client, volume, and application specific, and may be at the volume level or at the sub-volume level. Volume level recovery refers to replication of entire volumes, whereas sub-volume level refers to recovery at a folder, file, or object level. Referring to FIG. 6, a browser interface screen 600, according to one embodiment of this invention, includes a plurality of frames, such as directory frame 602 and a contents frame 604. The directory frame generally provides a list of all available drives, partitions, volumes, snapshots, backups, etc. and the file folders therein, of a client computer in a hierarchical arrangement. The contents frame 604 generally lists the contents of any item appearing in the directory frame 602, such as folders, files, or objects. The contents may be displayed by highlighting any one of the items in the directory frame 602. By selecting the "My Snapshots" folder, for example, the contents of the snapshots folder 612 are displayed in the contents frame 604. The contents may be displayed with relevant details, such as the date of creation, persistence, association, the capacity of the volume, etc. In one embodiment, the user may change the properties of a snapshot, such as how long a particular snapshot will persist, the location, etc., and the user may direct the creation of another volume or copy of a software snapshot using, for example, CommVault data movers. Prahlad, paragraph 66.

This paragraph describes a user interface that a user can use to browse and recover data. Thus, the Examiner appears to be equating the user interface with the data management resource of claim 1. However, as noted above, the Examiner earlier equated the data management resource of claim 1 with the volumes described in Prahlad. Thus, it is inconsistent to equate two completely disparate elements of Prahlad with the data management resource of claim 1. Additionally, if the user interface described in paragraph 66 of Prahlad is being equated with the data management resource of claim 1, the rejection has failed to show how Prahlad teaches or suggests selecting that user interface using an attribute of a component.

Accordingly, claim 1 is further patentable over the cited art for these reasons, as are dependent claims 2-12. Claims 13-31 are patentable over the cited art for similar reasons.

Further with respect to claim 4, the cited art fails to teach or suggest: “wherein said selecting a component of said plurality of components comprises: selecting at least one of a database directory, a table space container, and a redo log directory.”


The Examiner relies upon paragraph 66 (quoted above) of Prahlad to teach this feature, stating: “That is, selection of component (volume) is selected from a directory.” OA2, p. 5. In response, the Applicants note that the act of selecting something from a directory is clearly not the same as the act of selecting the directory itself, and thus the cited art fails to teach or suggest claim 4 for this reason. Furthermore, the act of selecting a volume is clearly different than the act of selecting a database directory or selecting a redo log directory, since a volume is clearly not a database directory or a redo log directory. For at least these reasons, claim 4 is further patentable over the cited art.

CONCLUSION

In view of the amendments and remarks set forth herein, the application and the claims therein are believed to be in condition for allowance without any further examination and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephone interview, the Examiner is invited to telephone the undersigned at 512-439-5087.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicant hereby petitions for such extensions. Applicant also hereby authorizes that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to deposit account 502306.

Respectfully submitted,



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